

PROGRAMMING ASSIGNMENT 1**Due date:** 19.10.2018 10:00 am

1) Write a shell script that takes a single command line argument which is a file containing one integer per line as the following:

```
20
18
5
32
4
```

From this data, your program should print out a row of stars of the given length for each integer. For the input above, your program should print the following:

Ex:

```
$ ./myprog1.sh filename
```

```
*****
```

```
*****
```

```
*****
```

```
*****
```

```
*****
```

2) Write a shell script that reads integers (one-per-line) from the user until it reads the word “end”. Afterward, it will report the maximum number given by the user.

Ex:

```
$ ./myprog2.sh
```

```
Enter a sequence of numbers followed by "end"
```

```
7
```

```
18
```

```
42
```

```
123
```

```
54
```

```
92
```

```
end
```

```
Maximum : 123
```

3) Write a shell script that takes an optional argument as a directory, and removes all zero length ordinary files in the directory. If directory argument is not given, it should remove all zero-length files in the current directory.

Ex:

```
$ ls -l /home/std/Desktop
```

```
-rw----- 1 std std 152144 Jun 20 2005 alice-in-wonderland.txt
```

```
-rw----- 1 std std 0 Jun 20 2005 barleby-scrivener.txt
```

```
-rw----- 1 std std 13421 Jun 20 2005 calaveras-county.txt
```

```
-rw----- 1 std std 635 Jun 20 2005 french.txt
```

```
-rw----- 1 std std 0 Jun 20 2005 hawthorne.txt
```

```
-rw----- 1 std std 172541 Jun 20 2005 looking-glass.txt
```

```
drwx----- 14 std std 476 May 25 2007 shakespeare
```

```
-rw----- 1 std std 0 Jun 20 2005 trees-and-other-poems.txt
```

```
$ ./myprog3.sh /home/std/Desktop
3 zero-length files are removed from the directory: /home/std/Desktop
$ ls -l /home/std/Desktop
-rw----- 1 std std 152144 Jun 20 2005 alice-in-wonderland.txt
-rw----- 1 std std 13421 Jun 20 2005 calaveras-county.txt
-rw----- 1 std std 635 Jun 20 2005 french.txt
-rw----- 1 std std 172541 Jun 20 2005 looking-glass.txt
drwx----- 14 std std 476 May 25 2007 shakespeare
```

Useful links:

<https://steve-parker.org/sh/bourne.shtml>

<http://mirrors.sunsite.dk/ldp/HOWTO/Bash-Prog-Intro-HOWTO.html>

Notes:

- You are required to submit a report that includes explanations about implementations with screenshots of your sample executions.
- You need to work individually, no group work is allowed.
- No late homework will be accepted.

Submission: You are required to submit your **commented** source code and report to CMS. Please create a compressed file including all source files and report; and name it as yourstudentnumber_P1.zip (e.g. If your student number is 201812345678, the file name must be 201812345678_P1.zip).